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NAVSHIPS S6152-AP-MNO-C10/Model 42VLR
(N00104-77-C-2542 77Nov21)



Forenta

MORRISTOWN, TENNESSEE 37814

**ALL PURPOSE UTILITY PRESS
"VL" SERIES
MODELS 42 and 46**

**INSTRUCTION MANUAL
and Parts List**

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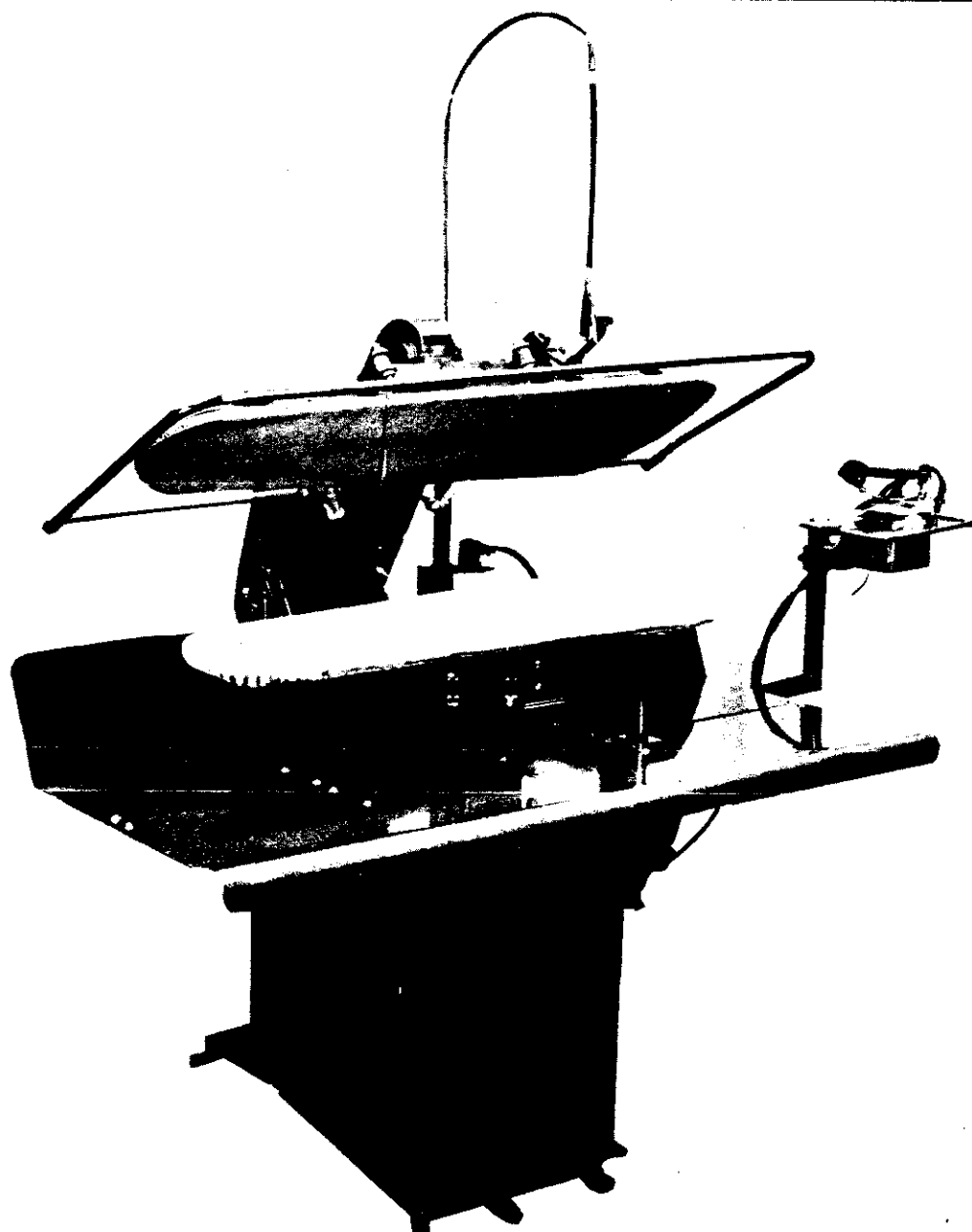
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"VL" SERIES ALL PURPOSE UTILITY DRY CLEANING PRESSES



42 VLL - Left Hand Press

SPECIAL FEATURES

All Forenta "VL" Series offer a contoured scissor press design to All Purpose Utility Press requirement. Simple, durable and reliable, this Forenta design offers economy and long, long life.

Patented Forenta "crowbar" leverage assures a high-quality finish with one-third the normal air consumption. The head pressure against the buck is approximately 30 times air pressure.

The exclusive Forenta bar control makes it not only the fastest, but also the safest air operated press ever built. The press is instantly adjustable from high to low pressure simply by turning a knob conveniently located on the front of the machine.

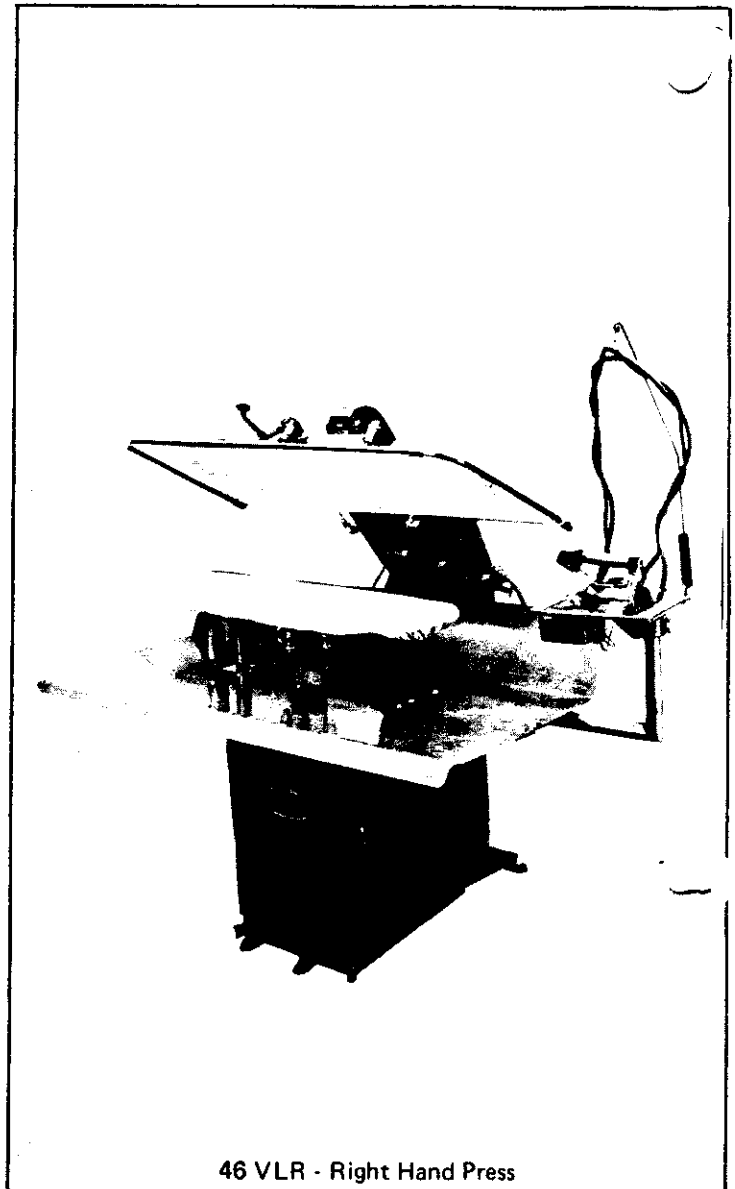
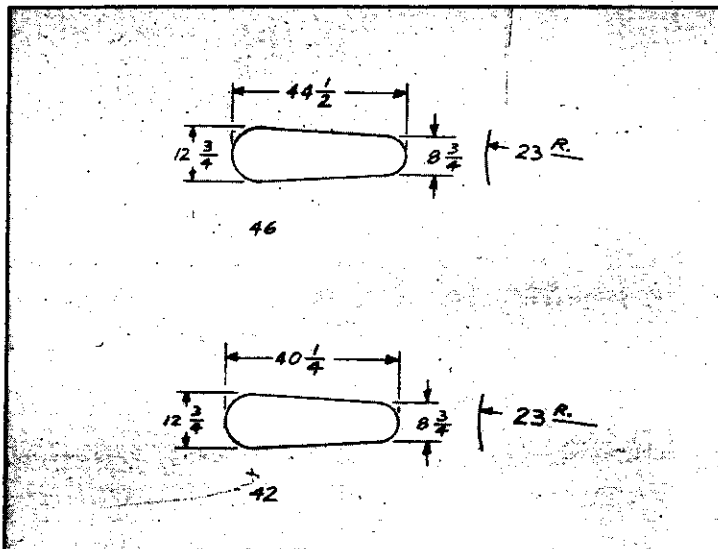
Foolproof valves use no diaphragm and are trouble-free. Oversize balancing springs give long service without breakage. Air regulator maintains constant pressure regardless of compressor fluctuation. Hinged front and sliding side panels permit instant opening of base for easy servicing.

"VL" SERIES DRY CLEANING PRESSES

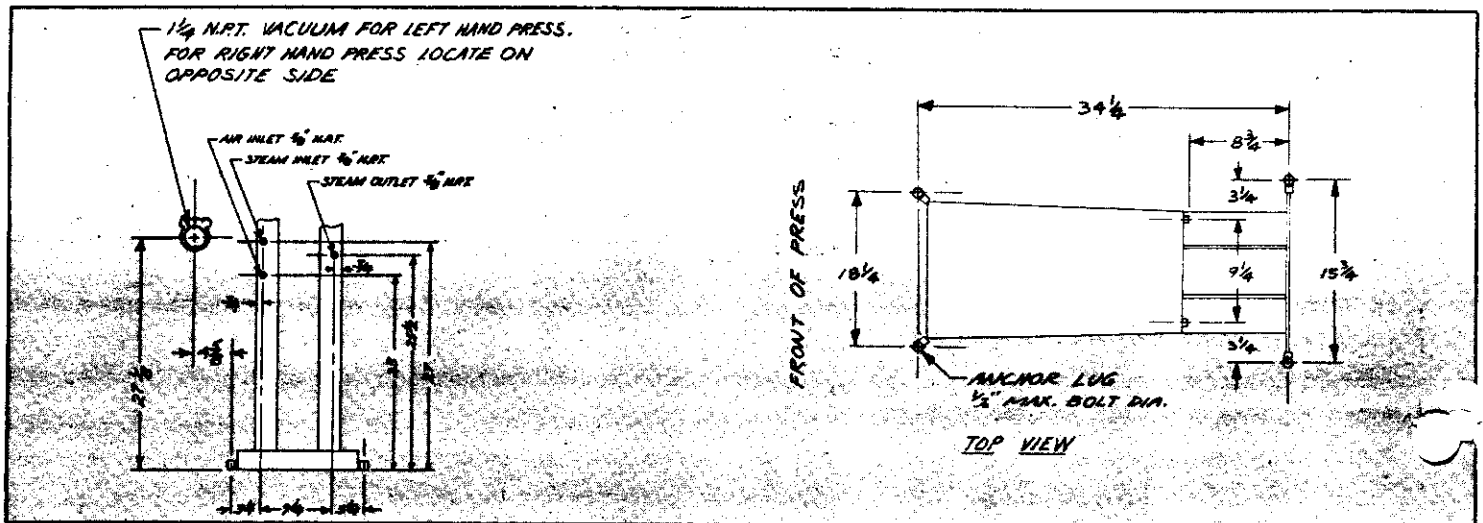
SPECIFICATIONS

Width, Over-all	60"
Depth, Over-all	44"
Height, Over-all	63"
Air Pressure	40* - 55*
Air Consumption	1/8 cu. ft. per min
Steam Pressure	75-85 Lbs.
Steam Inlet	1/4"
Steam Outlet	1/4"
Air Inlet	1/4"
Boiler H. P. rating	1 H P
Shipping Weight	890 Lbs.
Anchor Bolts	1/2"
Cu. Ft.	134
Electrical (with optional iron attachment)	120 volts, 6.6 amps, 800 watts, 60 cycle, 1 PH

STANDARD HEAD DESIGNS



PRESS BASE DIMENSIONS



INSTALLATION INSTRUCTIONS

Uncrating

Uncrate machines carefully and check for concealed damage. Remove from base and move to approximate location before removing any of the holding blocks that are used for shipment. It is best to leave these in position until machine has been connected and the air turned on.

If any damage caused by shipping is found, it should be reported to the transportation company and a claim filed by you.

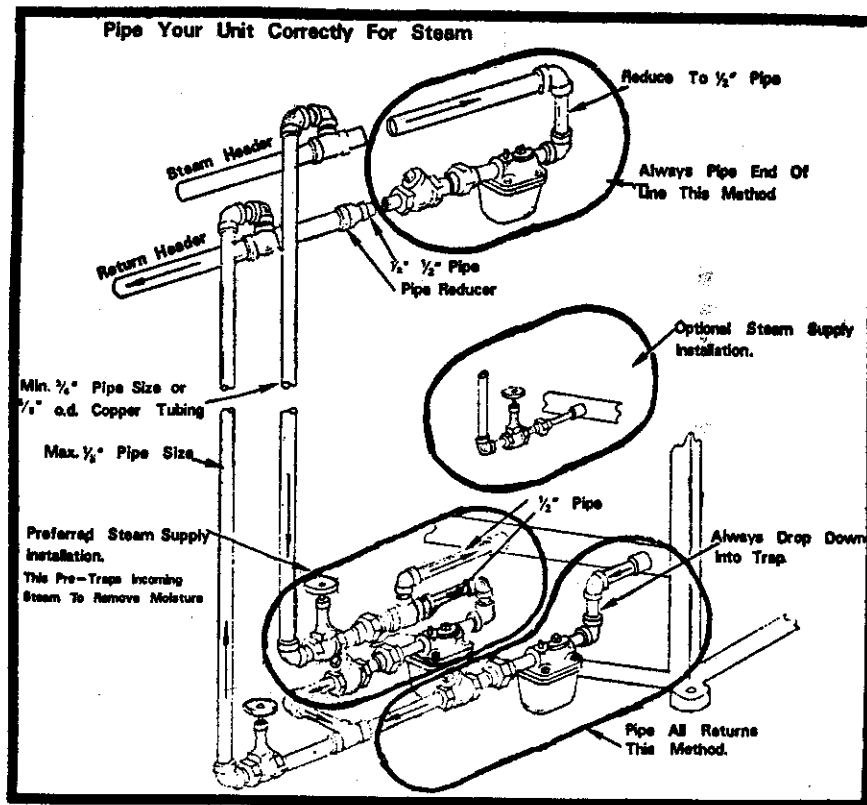
DO NOT PUSH, PULL OR ATTACH RIGGING TO THE HEAD, BUCK OR LEVERAGES.

Steam Piping

Secure the services of a competent steam-fitter. Steam inlets and outlets are marked. Do not connect with any smaller piping than the size of the connections on the machines themselves. Use traps and check valves on all return lines.

If your machine is piped according to the illustration below, you should have no problems with the steam supply.

NOTE: Steam lines should be blown out thoroughly before connecting to the machine. This will help prevent debris from damaging valves and stopping up lines.



PART # 28127-1

STEAM PIPING ILLUSTRATION

Compressed Air Connections

NOTE: Air lines should be blown out thoroughly before connecting to the machine. This will help prevent debris from damaging valves and stopping up lines.

All air-operated machines have 3/8" connection at rear (see specification page). We recommend air filters on each machine to prevent dirt and scale from the piping getting into the valves and air cylinders. If start and stop type of compressor is used, valve should be set so air does not go below 75 pounds. If constant running compressor is used with unloading valve, set between 70 and 80 pounds.

INSTALLATION INSTRUCTIONS (Continued)

Compressed Air Connections (Cont.)

NOTE: If other equipment require higher pressures, it is alright to set the compressor higher since all Forenta equipment has its own pre-set internal regulator.

A shut-off valve should be installed at each machine so that it can be serviced, if necessary, without shutting down the rest of the unit.

Electrical Connections

Always use a qualified electrician in wiring any Forenta press to insure compliance with all local and national codes.

OPERATING INSTRUCTIONS

Safety Control Bar Operation Only

When your press is designed to be operated by the Safety Control Bar only, the opening and closing operations are as follows:

1. To close the press head, pull down slightly on the Safety Control Bar. As soon as the bar moves down, the head will close automatically, unless the Safety Control Bar hits something. It is not necessary to pull on the bar to get the head to close.
2. To open, merely lift up on the bar to release the head. It will open automatically.

Two Hand Control/Safety Control Bar Operation

Operation of the two-hand control system is accomplished by depressing and holding the two buttons on the front of the table. This will bring the head down into pressing position. The machine still retains the safety feature of the control bar. If the bar hits some obstruction on the down stroke, the head will release. To raise the head at the end of the cycle, lift slightly on the control bar.

Pressure Adjustment

Adjust the press to meet your needs. Thicker garments, different kinds of materials, number of layers, etc., all have a bearing on the amount of pressure and length of time needed by the press. The Pressure Control knob is located under the front table in the center of the machine.

NOTE: This knob adjusts the position of the pressure arm roller in the cam at the rear top portion of the press. When the machine is in the pressing position, this roller should be $\frac{3}{4}$ " to 1" from the top of the cam. Turn clockwise to bring the roller higher in the cam slot. Turn counterclockwise to stop the roller at a lower point in the cam slot. The padding may need to be replaced if there is a lack of pressure at this point. Good pressing results are only possible with proper padding and pressure. (Refer to the "Maintenance" section in this manual for padding instructions.) Caution: Do not adjust so that roller hits the top of the cam slot.

Temperature

If the steam system is working properly, the proper temperature for good pressing will be maintained. The proper head temperature is around 285°F which should be obtained with 75-80 PSIG steam. This is the average temperature and pressure to give steam with the proper moisture content.

Head Steam

Head steam is obtained by manually depressing the handle on the head steam valve.

Buck Steam

Buck steam is obtained by manually depressing the right foot pedal.

Vacuum

Vacuum may be obtained by pressing on the left foot pedal.

MAINTENANCE

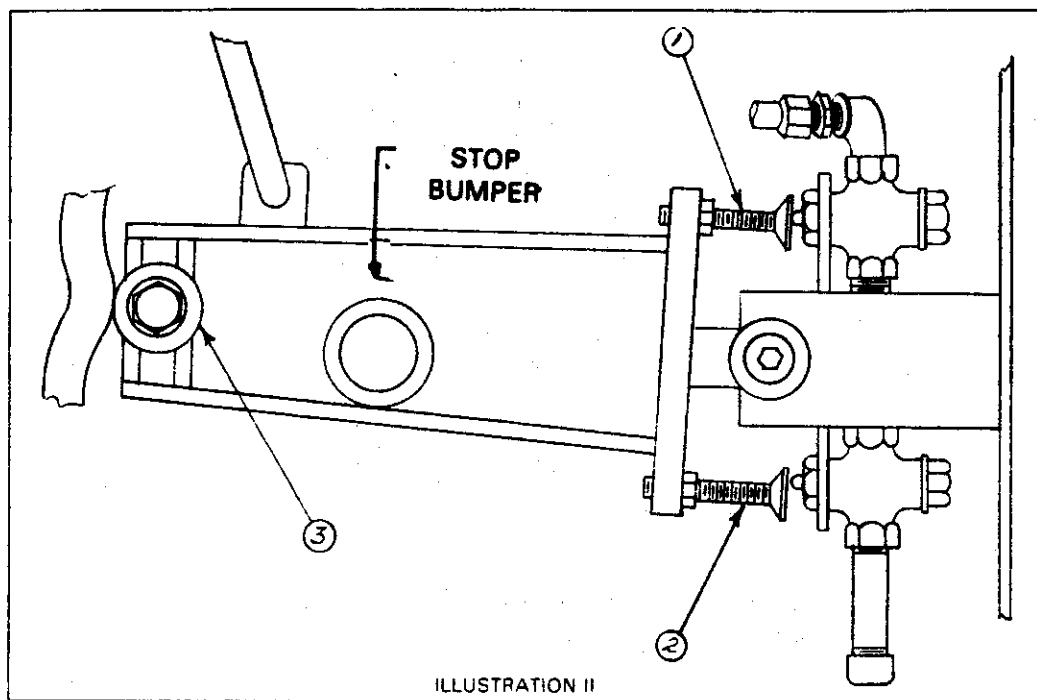
It is recommended that no adjustments be made on this press without first carefully reading the following instructions and without eliminating any outside causes for trouble, such as low air pressure, poor steam, etc.

Adjustment of Safety Control Bar

For the Safety Control Bar to work properly, it is necessary for the Valve Lever to be adjusted properly. In the Illustration below Adjusting Bolts #1 and #2 oppose each other. They should never need adjusting. For Control Bar only operated model, if adjustment is necessary, first make sure Roller #3 is adjusted against the hump so that the roller will pass from one side of the hump to the other as the Valve Lever is moved up and down. The Adjusting Screws on all models should be set so that the Valve Lever bottoms out on the stop bumper just before the stem on the valve bottoms out.

NOTE: The stems on the valves should never bottom out.

NOTE: The Safety Control Bar should always be adjusted so it is about 2" below the top of the buck when head is down in pressure.



If The Head Does Not Open Wide

This usually indicates weak springs. Tighten each of the large vertical springs on the rear of the press uniformly.

Double-Acting Shock Absorbers

If the head goes up so hard at the top that it bounces back down, this usually indicates the Shock Absorber needs adjustment. If the head slams against the buck on closing and proper operation cannot be secured by adjusting the Air Control Valve (see "Head Closing Speed Adjustment"), the Shock Absorber may need setting. This is accomplished by adjusting screws at each end of the shock cylinder. Loosen lock nut slightly before adjusting, and then tighten securely to prevent oil leakage. Adjust rear screw to control closing snubbing; adjust front screw to control opening snubbing action. Turning screw clockwise increases snubbing action and counterclockwise decreases snubbing action.

Adjust screws only about one turn at a time. A supply of oil should stay in the shock reservoir at all times. If oil has to be added, use SAE #10 non-detergent oil.

NOTE: If shock is very old and adjusting does not seem to make it work properly, drain the oil out through the adjusting screws and replace with SAE #20 non-detergent oil. If this does not help, then replace the shock absorber.

MAINTENANCE (Continued)

Air Cylinders

If the main pressure cylinder or any air cylinder develops air leaks, the O-ring must be replaced. When removing O-ring from the piston, be careful not to nick on edge of the groove. The O-ring can usually be slipped off by pressing the ring between thumb and forefinger and sliding toward one side to create looseness so that it can be pulled off with the other hand. Clean the piston and cylinder wall. Replace the O-ring using a liberal amount of plastilube grease. It is also advisable to use a new base gasket when re-assembling the cylinder. A light film of grease can be applied to the piston rod to prevent rust and reduce friction.

NOTE: Plastilube grease may be obtained from Forenta.

CAUTION: DO NOT PUT OIL IN CYLINDERS

Lubrication

All bearings are packed with grease and should last for years. However, grease fittings have been provided at all bearing points and should be greased at least every six months.

NOTE: Refer to parts illustration for lubrication points.

If Pressure Arm Jumps Just After Head Closes

First, be sure cylinder is properly lubricated and not binding. Next, set pressure adjustment by turning knob as instructed in the Operating Instruction section. If the trouble still persists, this usually indicates too much down-snubbing action. If the snubber takes hold too soon and before the head reaches the buck, it may cause excessive air pressure to build up in the cylinder, and as soon as the pressure lever goes from low pressure to high pressure position, it will move very rapidly three or four inches, rather than moving slowly into high pressure position. Adjust as instructed under "Double-Acting Shock Absorbers" in the Maintenance section. Head springs that are set too tight will also cause this.

Steam Hose

When replacing, be sure to use a new gasket and tighten bolts uniformly. Tighten only sufficiently to stop steam leak. Too much pressure on bolts will bend flange and cause more leakage.

Head Closing Speed Adjustment

Adjusting Valve #9 (see "Air Flow Diagram") can be turned clockwise to slow head movement down and turned counterclockwise to make the head close faster. The Valve should be adjusted so the head comes down rapidly and smoothly without slamming on the buck.

Air Pressure

Regulator #8 (see "Air Flow Diagram") in the line flowing to Valves #3, #4, and #13, should be set at approximately 40 PSI. Regulator #8 in the line flowing to Valve #12 should be set at approximately 55 PSI.

Padding

The padding must be maintained properly to assure garments are finished to the quality the press is capable of performing. The padding consists of a liner placed directly on the bare buck; a Monel Mesh pad is placed on top of the liner; a single piece of 20 oz. punched nylon flannel is then placed on top of the mesh pad (this should be large enough to overlap the edges of the buck and tuck slightly underneath the buck); next comes the outer cover which is tied on with a draw string and springs.

The flannel should be checked about every 4 weeks. If it has become hard and brittle, it should be replaced. This flannel must stay soft and have some bounce-back to it in order to get a good press. If it is not replaced when necessary, continuous pressing will cause it to deteriorate as it is compressed against the mesh pad. The deterioration can stop up the mesh pad, restricting steam and vacuum travel through the padding.

The mesh pad may last for one, two, or three years, more or less, depending on how much the press is used and depending on how well the flannel described above is maintained.

The liner and outer cover need be replaced only when they show signs of wear or deterioration. The outer cover should be washed when it becomes soiled.

NOTE: The padding, as a whole, must have some downward compression when the head comes into pressure, and upward expansion when the head is raised.

MAINTENANCE (Continued)

Grid (Head) Plates

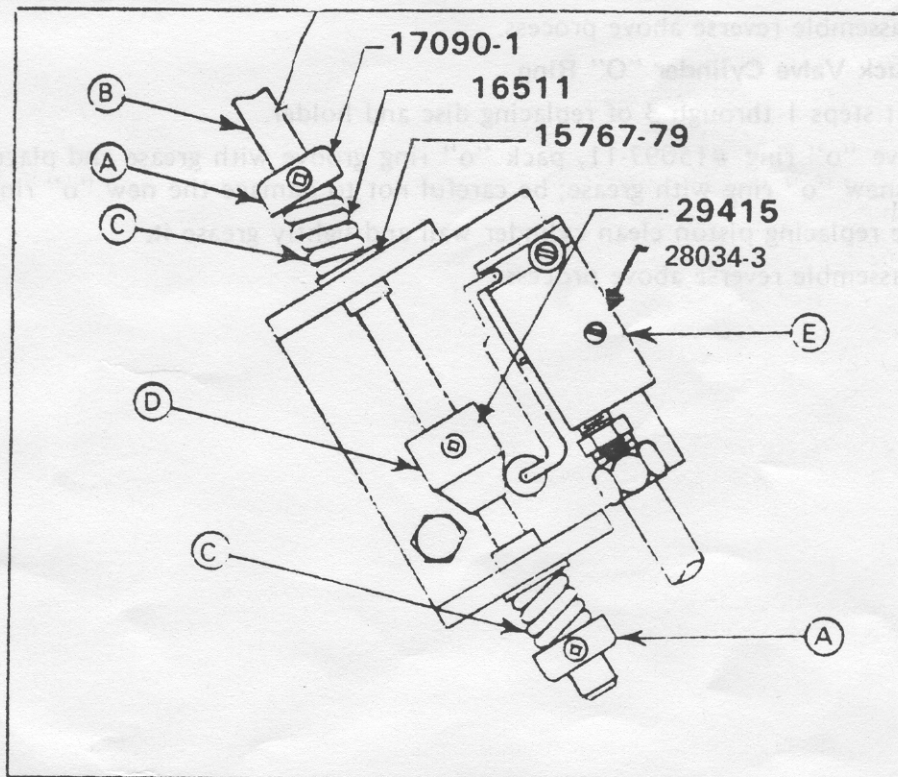
The grid plate should be removed and cleaned when it becomes soiled. It can be cleaned with a mild detergent and water. Cleaning solvents may also be used. The grid plate should be thoroughly dry before replacing on the head.

Air Strainer

Remove screen from air strainer #7 (see Air Flow Diagram) and clean as required.

Two-Hand Safety Control Operation Only (Optional)

If the press is designed for the head to close by use of the Two-Hand Control Buttons on the table, the Safety Control Bar has no affect on the closing of the head. However, the Control Bar does release the head with a gentle lift on the Control Bar. This bar should always be positioned about 2" below the top of the buck when the head is down. If adjustments are necessary (refer to illustration below), they can be made easily by loosening the Collars "A" on Shaft "B" and moving the Safety Control Bar to the proper position. When this position is attained, the Collars must then be adjusted against the Springs "C" to hold the Safety Control Bar in position and return it to position after it has been actuated. Cam "D" must be adjusted so that it opens Valve "E" with the slightest lift on the Safety Control Bar. When Valve "E" is opened, it will exhaust all air from the press.



MAINTENANCE (Continued)

BUCK VALVE REPAIR

NOTE: Refer to Buck Valve Parts Illustration.

Replacement of Disc and Holder

- Step #1. Remove the cylinder end #29711 by removing the two 16387-10 screws.
- Step #2. Remove nut 16355-8 from stem 29596; it may be necessary to hold the stem with a screw driver while loosening the nut.
- Step #3. Remove piston #29712 by turning the stem #29596 while holding the piston.
- Step #4. Remove the stem guide nut #25649-6 by using a deep well 1" socket. Disc holder #25649-1 and stem #29596 can now be removed from the valve body #25649-2.
- Step #5. Remove drive pin #25649-3 and replace disc and holder #25649-1. Lightly peen brass around ends of pin #25649-3.
- Step #6. To reassemble reverse above process.

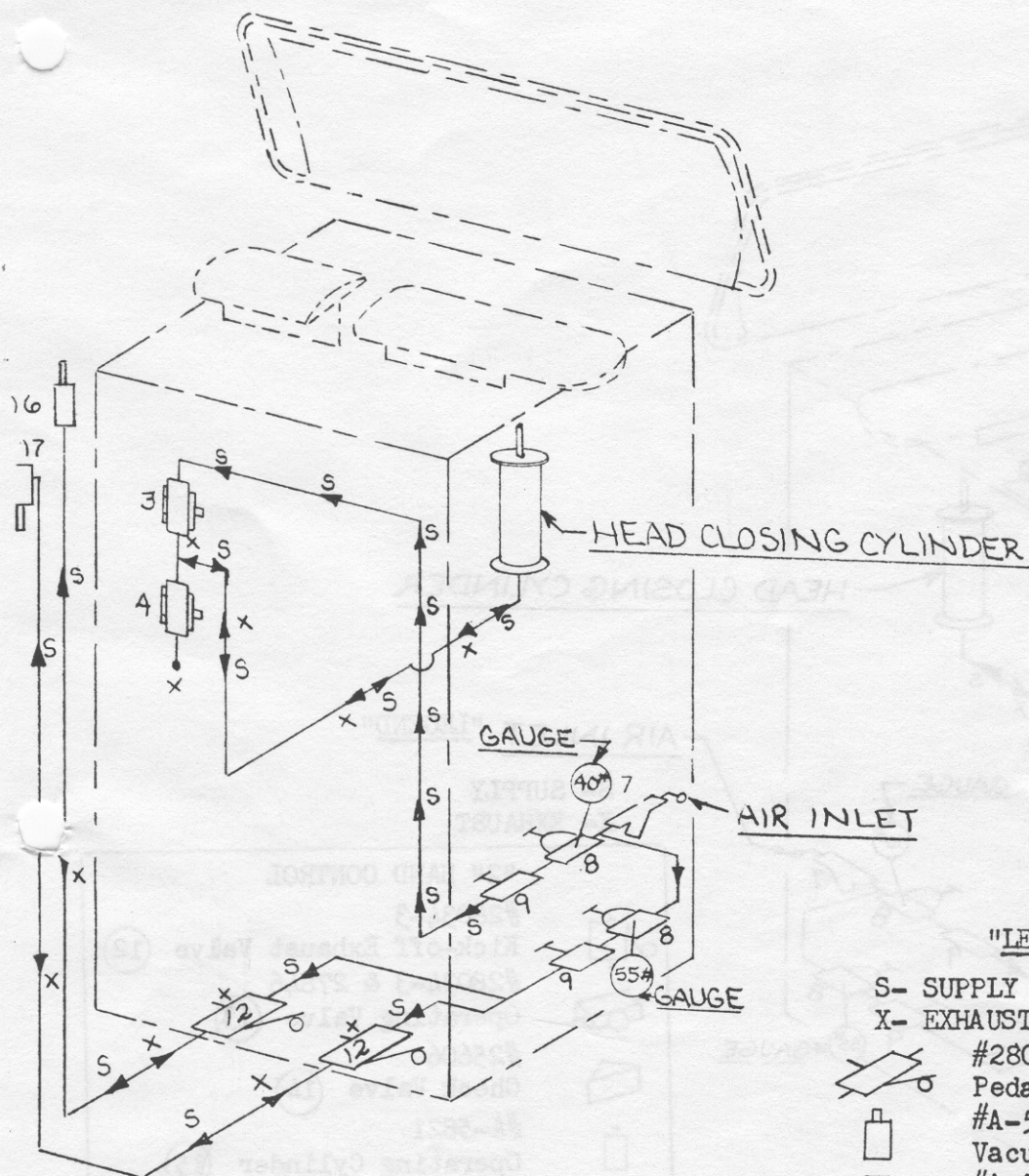
Replacement of Stem "O" Ring

- Step #1. Repeat steps 1 through 4 of replacing disc and holder.
- Step #2. Remove old "o" ring #15097-23 and pack "o" ring groove with grease and place new "o" ring on stem; cover new "o" ring with grease; be careful not to damage new "o" ring.
- Step #3. To reassemble reverse above process.

Replacement of Buck Valve Cylinder "O" Ring

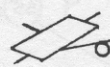
- Step #1. Repeat steps 1 through 3 of replacing disc and holder.
- Step #2. Remove "o" ring #15097-11, pack "o" ring groove with grease and place new "o" ring on piston; cover new "o" ring with grease; be careful not to damage the new "o" ring.
- Step #3. Before replacing piston clean cylinder wall and lightly grease it.
- Step #4. To reassemble reverse above process.

AIR CONTROL CIRCUITRY WITH GUARD RAIL CONTROL



"LEGEND"

S- SUPPLY
X- EXHAUST



#28034-3
Pedal Valve (12)



#A-5076
Vacuum Valve Cylinder (16)



#A-5863
Buck Steam Valve Cylinder (17)



#16610
Air Strainer (7)



#27559
Air Pressure Regulator (8)



#15100
Stem Operated Supply Valve (3)

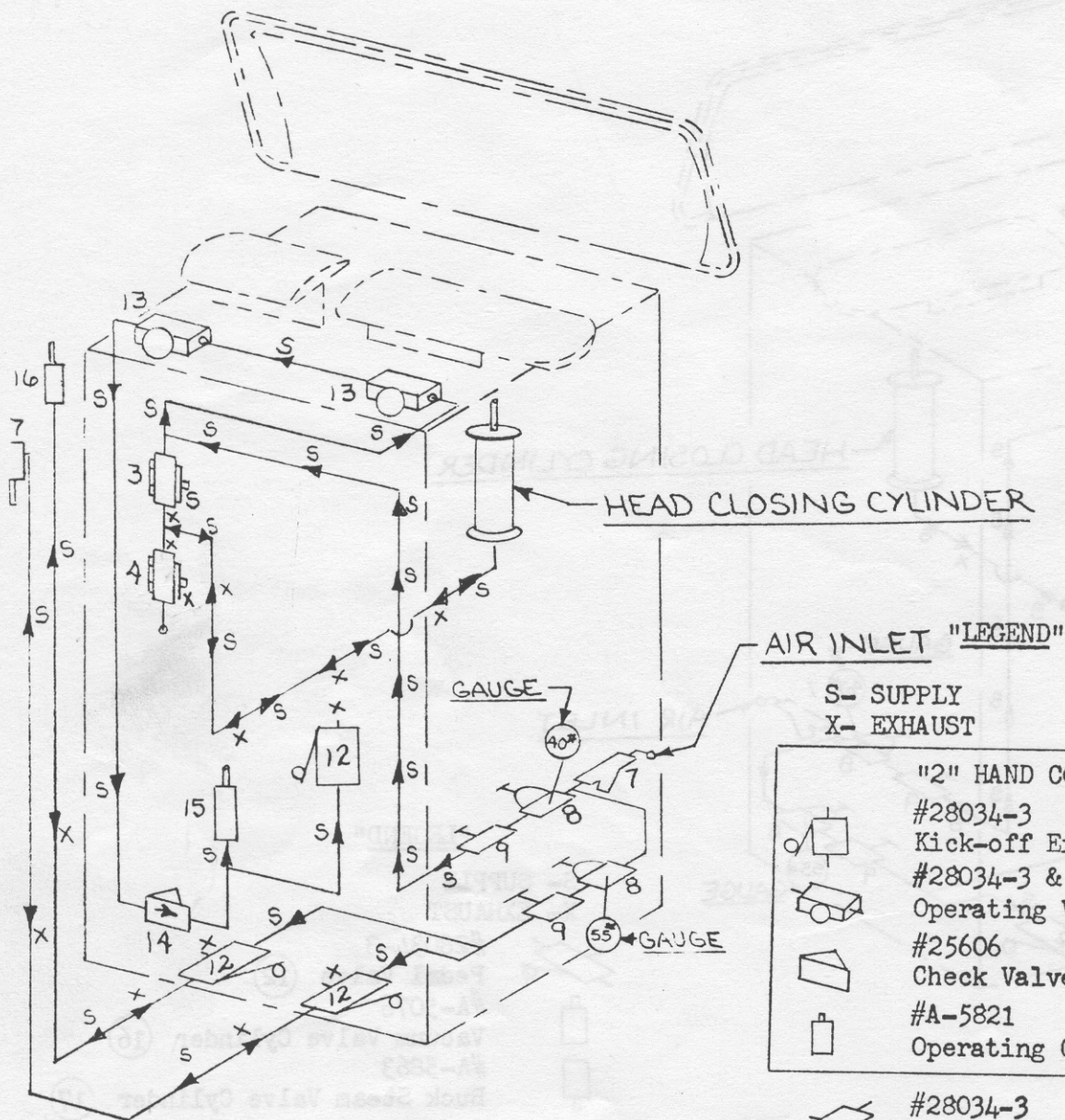


#15100
Stem Operated Exhaust Valve (4)



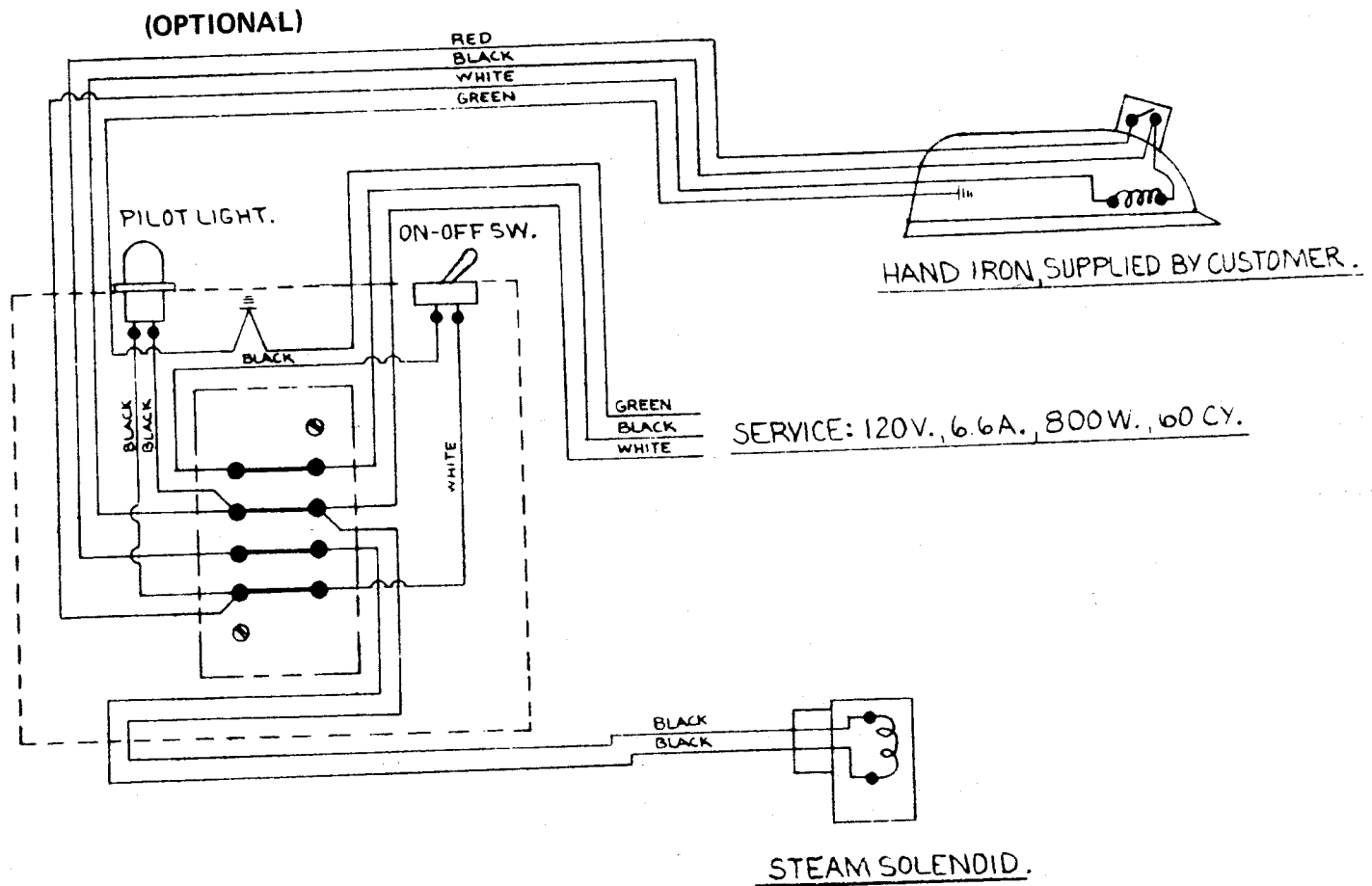
#16371
Head Closing Speed Control Valve (9)

AIR CONTROL CIRCUITY WITH TWO HAND CONTROL

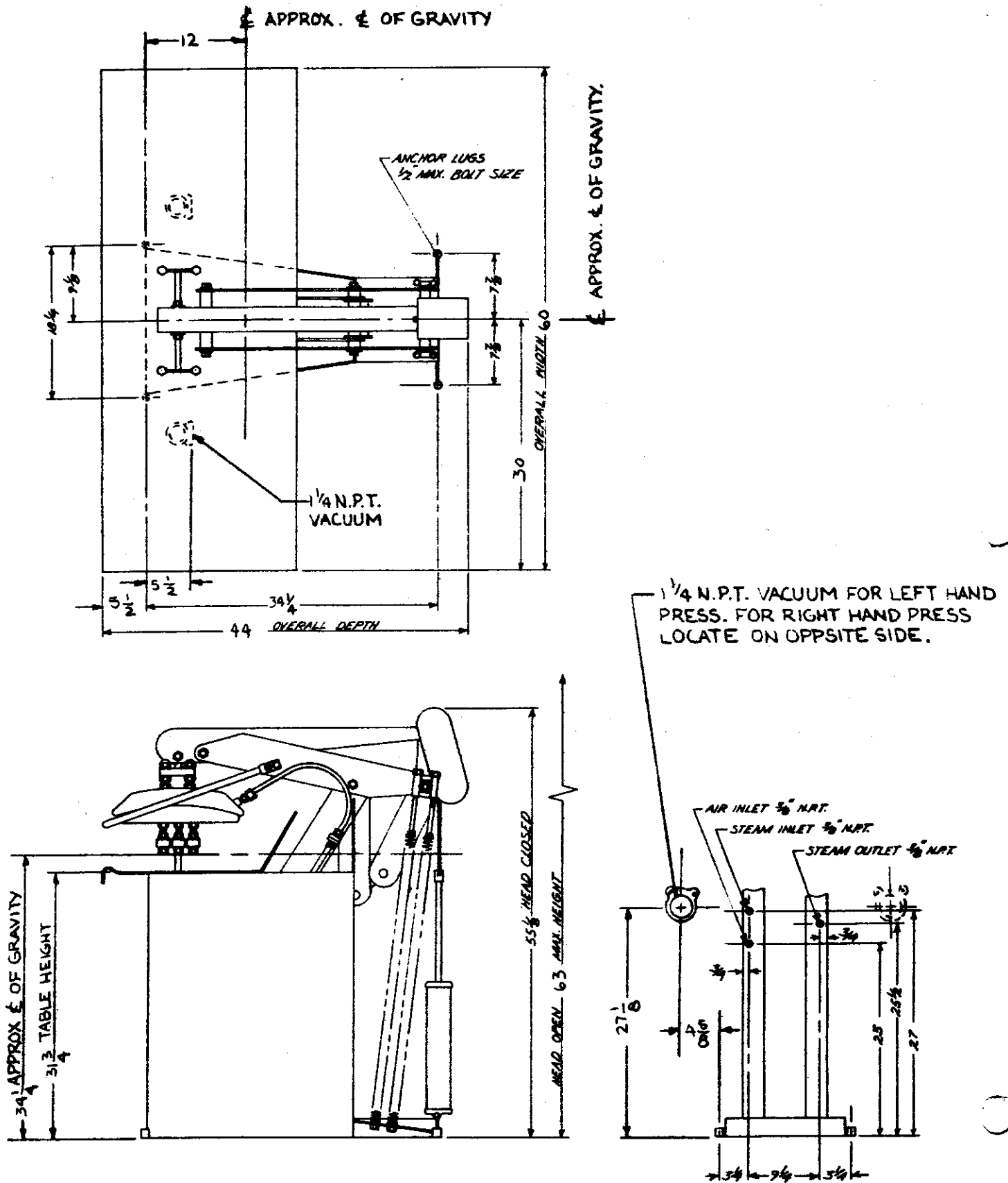


- #28034-3 Pedal Valve (12)
- #A-5076 Vacuum Valve Cylinder (16)
- #A-5863 Buck Steam Valve Cylinder (17)
- #16610 Air Strainer (7)
- #27559 Air Pressure Regulator (8)
- #15100 Stem Operated Supply Valve (3)
- #15100 Stem Operated Exhaust Valve (4)
- #16371 Head Closing Speed Control Valve (9)

IRON ATTACHMENT ELECTRICAL WIRING DIAGRAM



DETAIL LINE DRAWING



TROUBLE SHOOTING

Condition

Possible Cause

PRESS CLOSING SLOWLY

- A. Air pressure below 40 lbs.
- B. Air regulator piston assembly needs replacing.
- C. Air metering valve #9 not open enough.
- D. Main air valve #3 not being opened enough.
- E. Disc in #4 air valve leaking.
- F. "O" Ring leaking in main air cylinder.
- G. Snubber out of adjustment.

PRESS NOT CLOSING

- A. Low air pressure.
- B. Air metering valve #9 closed.
- C. Main air valve #3 not opening.
- D. "O" Ring in head closing cylinder needs replacing.

PRESS CLOSING TOO FAST

- A. Air pressure above 40 lbs.
- B. Air metering valve #9 open too much.
- C. Snubber out of oil.
- D. Snubber out of adjustment.
- E. Air regulator piston assembly needs replacing.

PRESS CLOSING WITH A THUMP

- A. Snubber out of adjustment.
(NOTE) To lessen snubbing action, turn rear bolt one turn at a time counterclockwise until the desired results are obtained.
- B. Air metering valve #9 closed too tight.

HEAD SLAMS UP WHEN RELEASED

- A. Snubber out of oil.
- B. Snubber out of adjustment.
(NOTE) To increase snubbing action turn front bolt one turn at a time clockwise.

HEAD WON'T OPEN

- A. Main exhaust valve #4 not opening.
- B. One or both of the two large springs in the rear of the press is broken or out of adjustment.

AIR LEAKS THROUGH SMALL HOLE IN TOP OF THE REGULATOR

- A. Replace air regulator diaphragm.

CONTINUOUS AIR LEAK THROUGH BLEED HOLE IN CYLINDER WALL OR TOP WHEN CYLINDER IS UNDER PRESSURE

- A. Cut or worn "O" Ring.
(NOTE) When "O" Ring is replaced, clean the cylinder and lubricate the cylinder wall. After "O" Ring has been installed on the piston, pack the groove around "O" Ring with grease. See "MAINTENANCE."

AIR PRESSURE ON PRESS BUILDS UP TO MAIN LINE PRESSURE

- A. Piston assembly in air regulator not seating. Replace.

DROP IN PRESSURE MORE THAN 4 OR 5 LBS. WHEN PRESS IS OPERATED

- A. Partial stoppage in air supply line to press.
- B. Dirty regulator screen and carbon build-up in regulator air passage.
- C. Piston assembly in bottom of air regulator needs replacing.
- D. Screen in air strainer #7 needs cleaning.

TROUBLE SHOOTING (Continued)

Condition

AIR PRESSURE CANNOT BE REGULATED BY ADJUSTING SCREW IN TOP OF AIR REGULATOR

HEADS DO NOT COMPLETELY OPEN OR DROP SOMEWHAT AFTER OPENING

AIR LEAKING AROUND STEM OF VALVE

SAFETY CONTROL BAR BOUNCES ON NON-TWO-HAND-CONTROL MODELS

NO BUCK STEAM

BUCK STEAM ALL THE TIME

HEAD STEAM ALL THE TIME

NO VACUUM

VACUUM ALL THE TIME

WET PADDING

Possible Cause

- A. The spring in top of regulator is broken or rusted, causing loss of tension; spring needs replacing.
 - B. Diaphragm leaks and needs replacing.
 - C. Piston leaks and needs replacing.
-
- A. Add enough head spring tension to hold the head at a full open position.
-
- A. Small "O" Ring on stem needs replacing.
-
- A. Tighten spring tension bolt located under press table and to the left of the Pressure Adjustment Knob.
(NOTE) Too much tension can make the bar hard to operate resulting in possible injury to the operator.
-
- A. Valve #12 not opening.
 - B. "O" Ring in Buck Steam Cylinder #16 leaking.
-
- A. Buck valve operating cylinder #16 sticking holding buck valve open.
 - B. Teflon disc in buck valve leaking.
 - C. Valve #12 sticking supplying air to the buck valve operating cylinder all the time.
(NOTE) Shut valve #9 off and disconnect air supply line at valve #12. Add a few drops of non-detergent oil; reconnect line; open valve #9; operate valve #12 operating pedal.
-
- A. Disc in head steam valve leaking.
 - B. Spring broken in head steam valve.
-
- A. "O" Ring in vacuum valve operating cylinder leaking.
 - B. Vacuum valve operating cylinder supply valve #12 not opening.
-
- A. Vacuum valve disc leaking.
 - B. Vacuum valve spring broken.
 - C. Vacuum valve operating cylinder sticking.
 - D. Vacuum valve operating cylinder supply valve sticking.
(NOTE) Shut valve #9 off and disconnect air supply line at valve #12, add a few drops of non-detergent oil, reconnect line open valve #9 and operate valve #12 operating pedal.
-
- A. Trap not dumping properly.
 - B. Machine not piped properly.
 - C. Vacuum cycle too short.
 - D. Not using vacuum.
 - E. Steam cycle too long.
 - F. Machine not level.
 - G. Vacuum valve leaking.
 - H. Buck valve leaking.

TROUBLE SHOOTING (Continued)

Condition

Possible Cause

SEAM IMPRESSIONS

- A. Improperly padded.
- B. Worn out padding.
- C. Dirty, packed padding.
- D. Using too much pressure for type of material being pressed.

WRINKLES IN GARMENT

- A. Padding broken down. Needs replacing.
- B. Operator not pressing garment properly.
- C. Head valve leaking can cause wrinkles.

WATER ACCUMULATES IN THE
VACUUM LINE OVER NIGHT AND
BACKS UP INTO THE BUCK,
WETTING THE PAD

- A. Add a drip leg to the vacuum line at a point lower than the machine vacuum valve. Attach a swing check valve to the bottom of the drip leg. This drains when vacuum is off and and closes when vacuum is open.

NOTE: The vacuum valve will not prevent water from getting into the press if enough accumulates in the vacuum line.

TWO HAND CONTROL TROUBLE SHOOTING

HEAD WILL NOT STAY
CLOSED

- A. #14 check valve leaking.
- B. #12 head valve leaking or sticking.
- C. "O" Ring leaking in #15 cylinder.

HEAD WILL NOT OPEN WHEN
GUARD RAIL IS RAISED

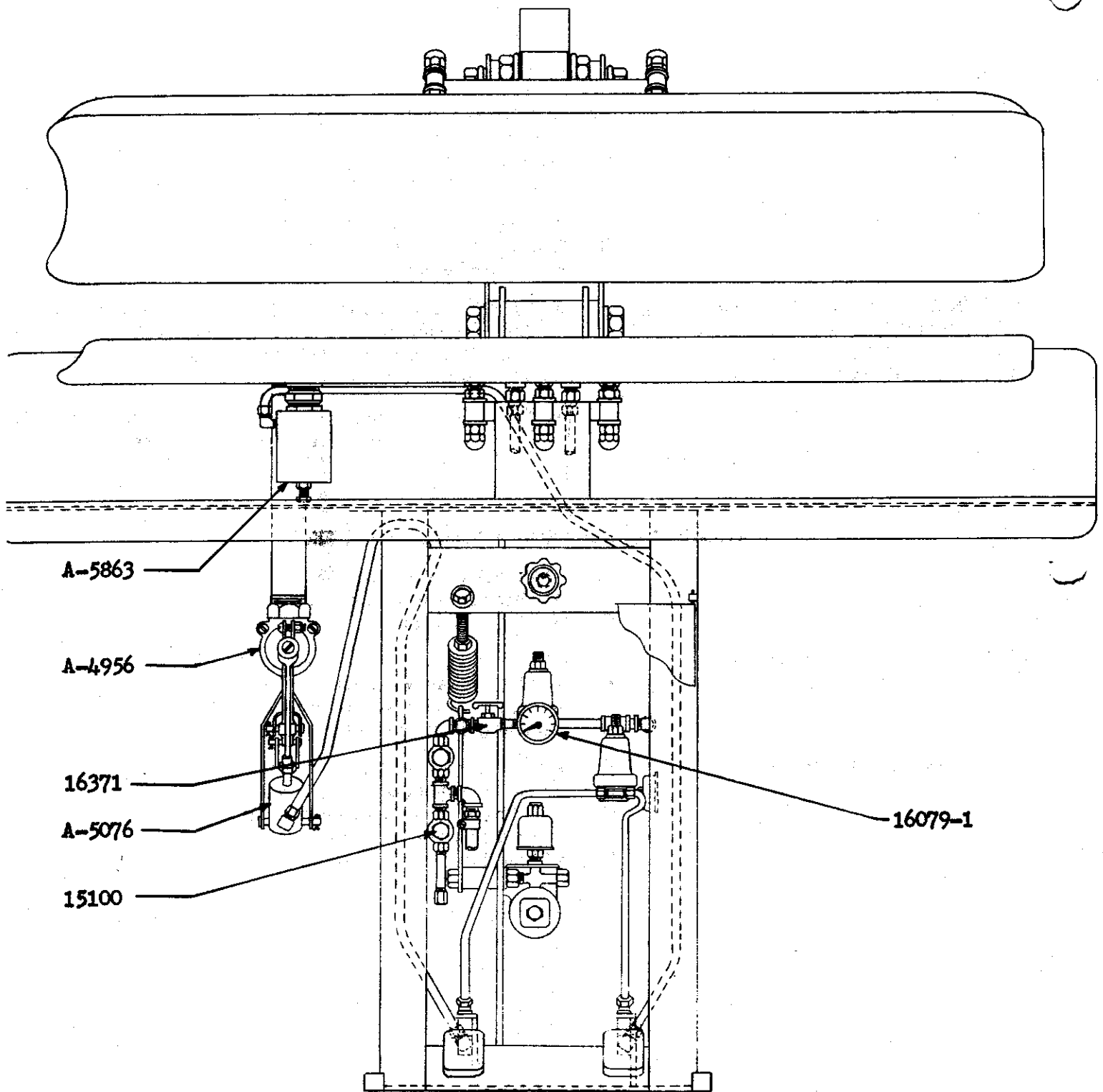
- A. #4 stem operated exhaust valve not opening.
- B. #12 head release valve not opening.
- C. Spring that pulls valve lever broken.
- D. Main head lift spring broken.

HEAD WILL NOT CLOSE

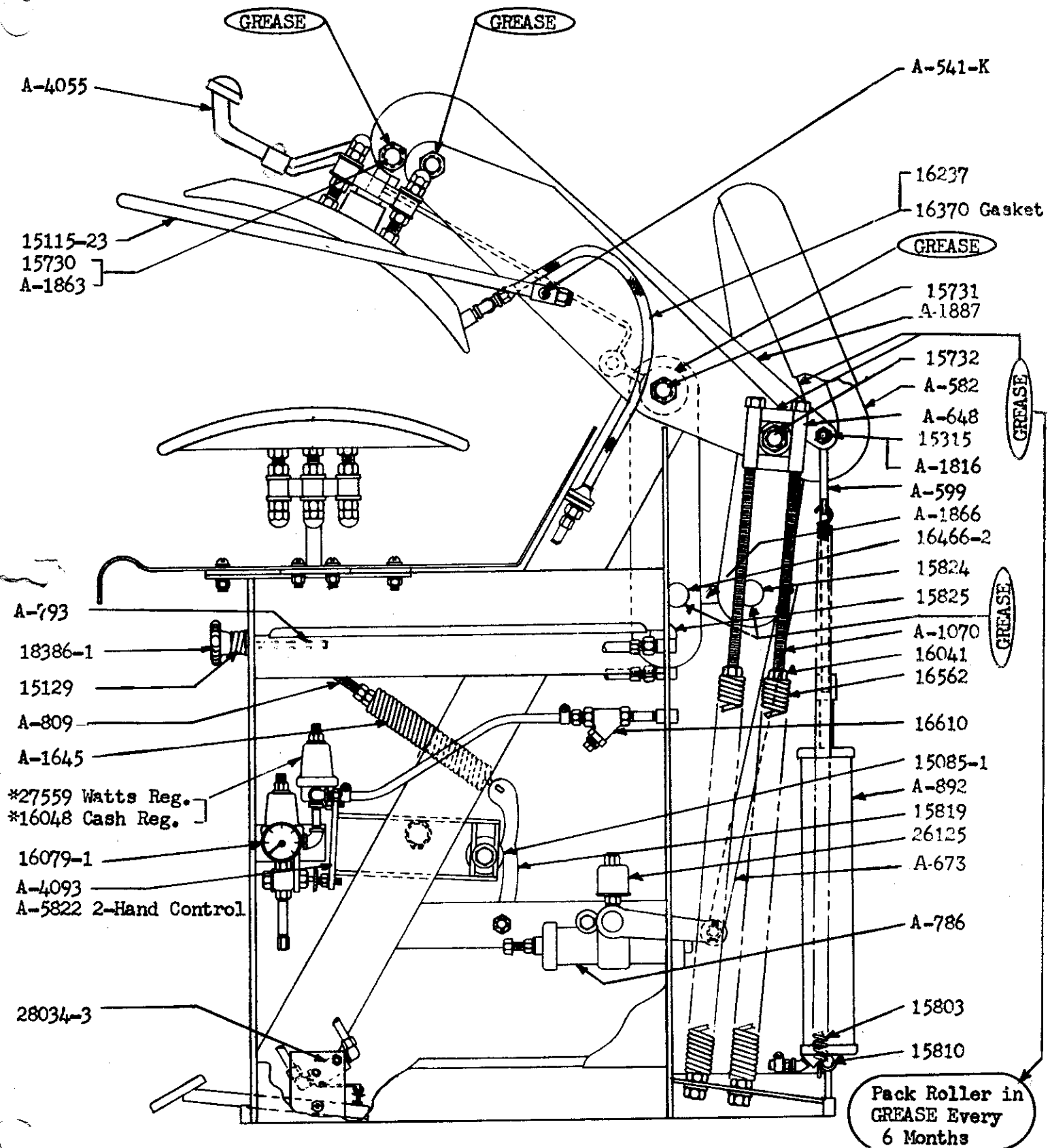
- A. Valve #13 (two button control valve) not opening.
- B. "O" Ring in cylinder #15 leaking.
- C. "O" Ring in head closing cylinder leaking.
- D. #3 head closing supply valve not opening.
- E. #4 head exhaust valve leaking.

PARTS ILLUSTRATION

FRONT VIEW

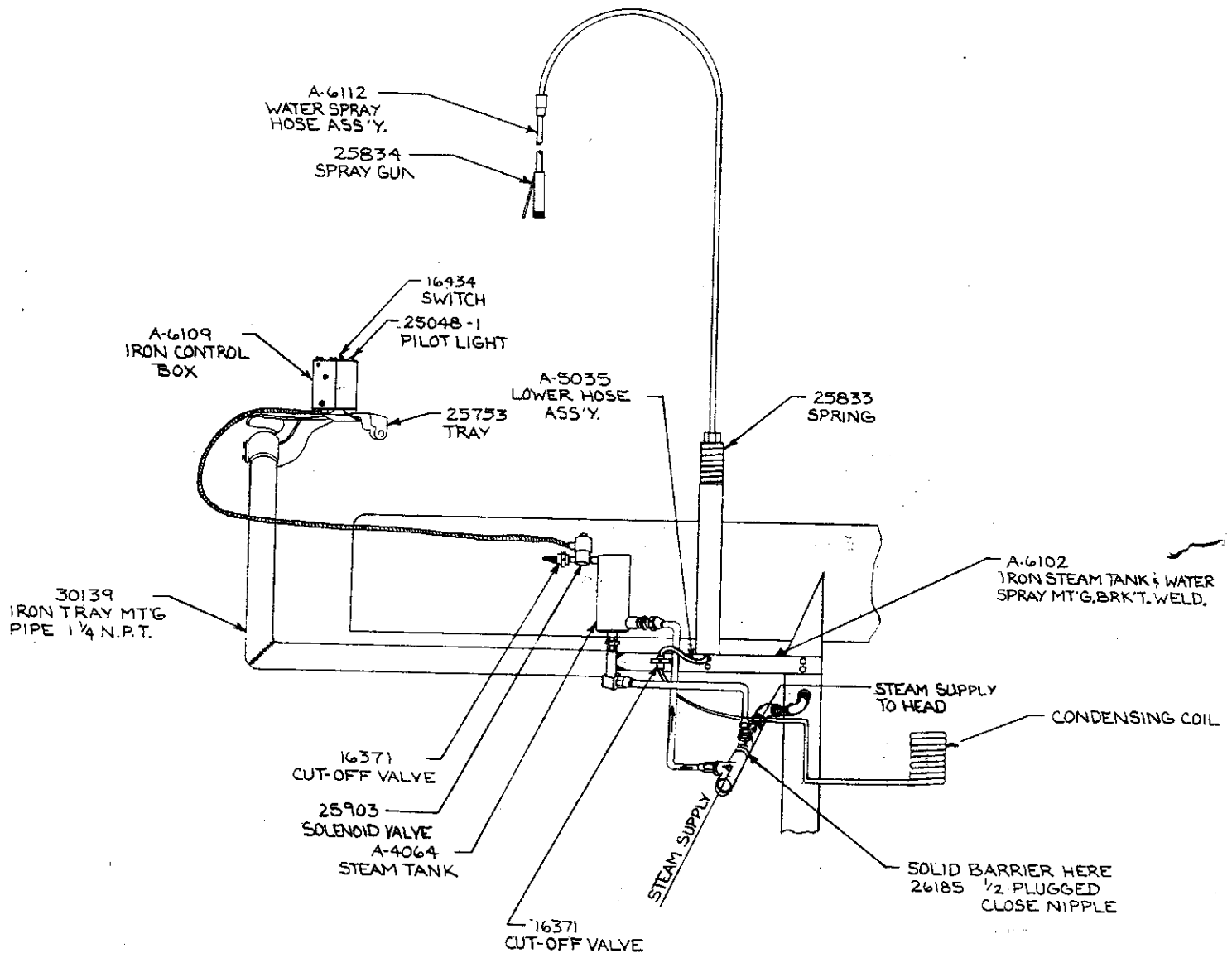


PARTS ILLUSTRATION SIDE VIEW



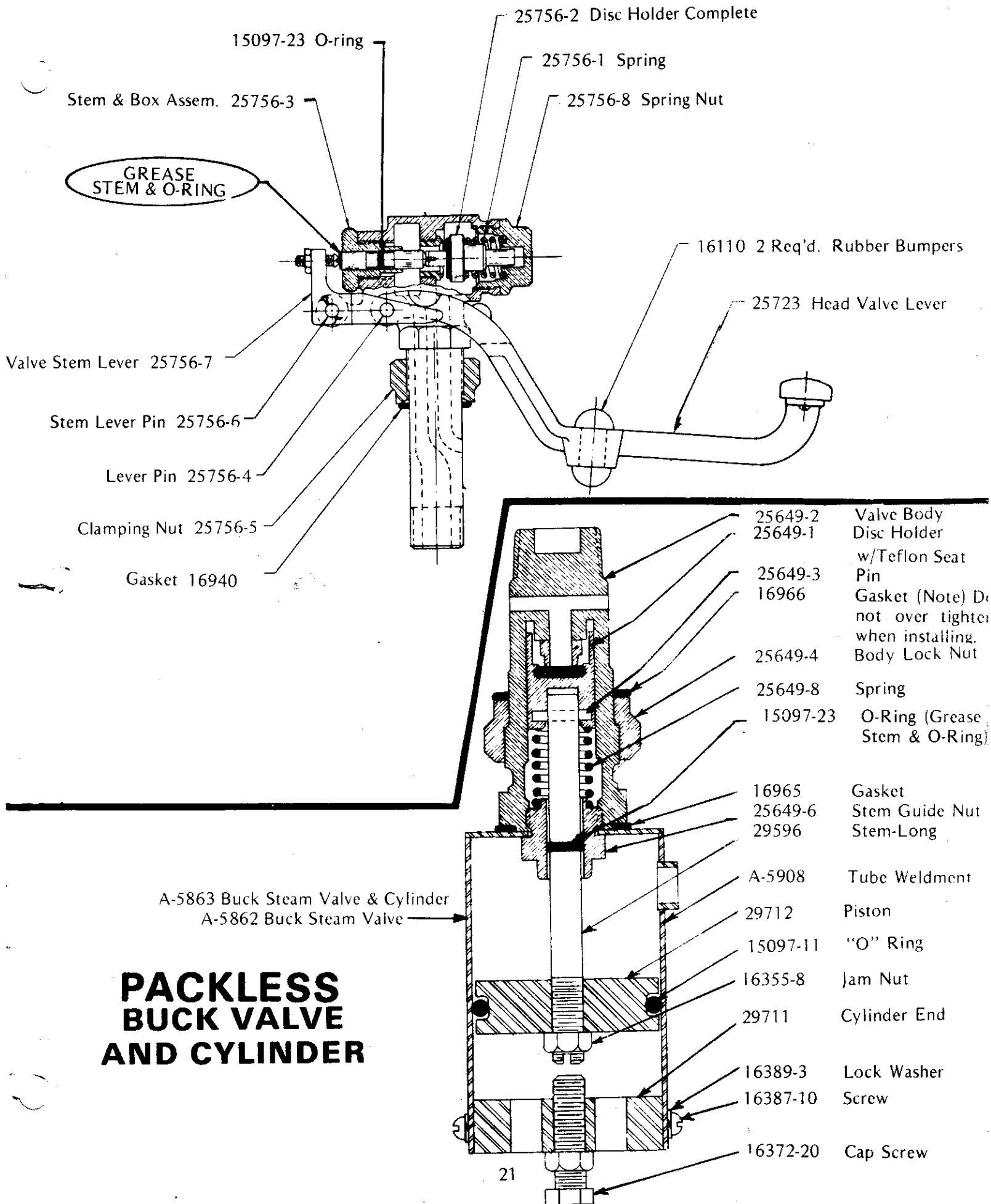
****NOTE:** 16048 Regulator is shown. 27559 Regulator has a square base with 4 screws attaching the top to the base. It is important that you properly identify your regulator when ordering replacement parts.

IRON ATTACHMENT PARTS ILLUSTRATION



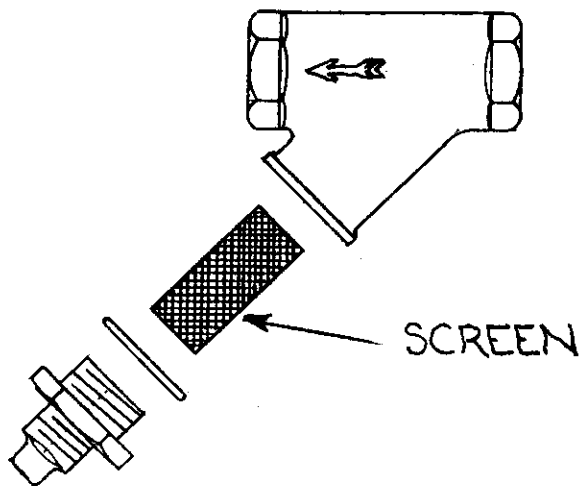
IRON ATTACHMENT PARTS ILLUSTRATION

PACKLESS HEAD STEAM VALVE A-4055

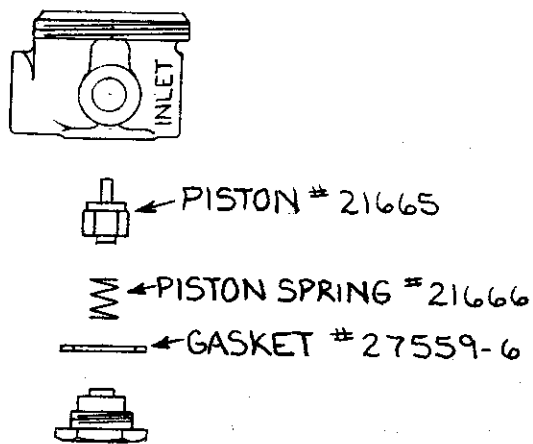
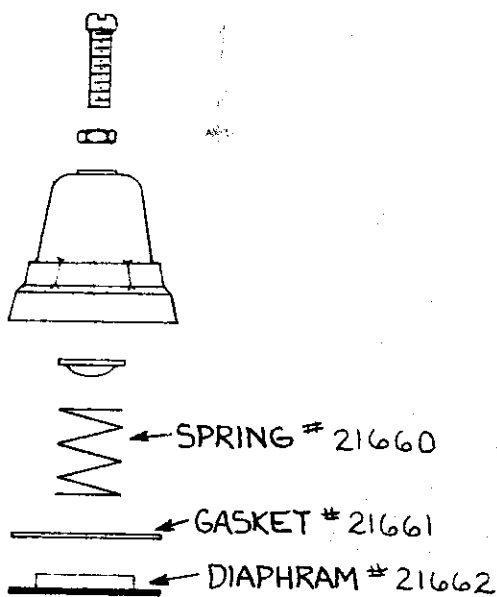


PACKLESS BUCK VALVE AND CYLINDER

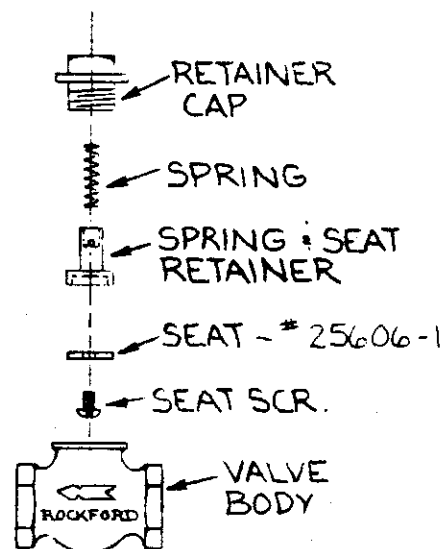
VALVE PARTS ILLUSTRATION



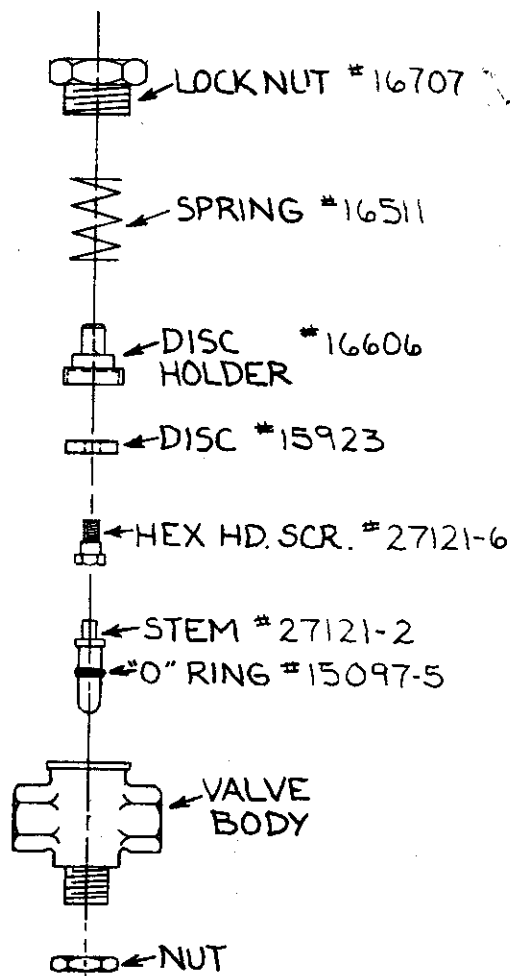
45° Y AIR STRAINER
16610



1/4" REGULATOR # 16048

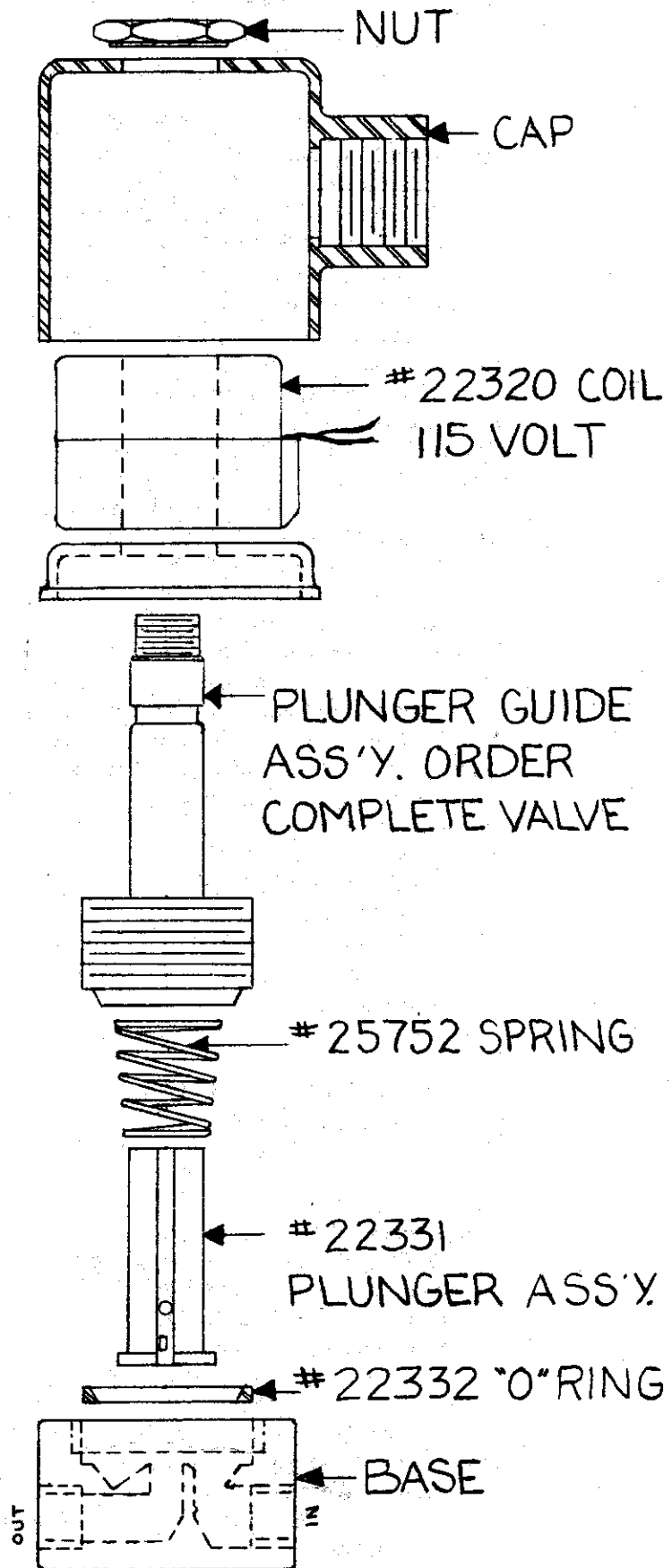


HORIZONTAL SPRING LOADED
CHECK VALVE # 25606



1/4" AIR WHISTLE VALVE #15100

VALVE PARTS ILLUSTRATION



#25903
SOLENOID VALVE

PARTS LIST

Part No.	Description	No.
A-5821	Actuating Cylinder (2-Hand Control)	1
A-2569	Cylinder Wall (2-Hand Control)	1
15097-6	"O" Ring 7/8" O.D. (2-Hand Control)	1
16387-7	Round Head Screw (2-Hand Control)	2
A-5681	Piston (2-Hand Control)	1
25606	Check Valve (2-Hand Control)	1
25606-1	Check Valve Seat (2-Hand Control)	1
17090-1	Safety Collar (2-Hand Control)	2
28034-3	Air Valve (2-Hand Control) (Pedal valves & steam)	5
27846	Push Button (2-Hand Control)	2
16511	Spring, Kick-Off Rod (2-Hand Control)	2
15767-79	Bushing 3/8 x 1/2 x 1/2 (2-Hand Control)	2
29415	Safety Kick-Off Cam (2-Hand Control)	1
29441	Safety Kick-Off Rod (2-Hand Control)	1
15941	Kick-Off Spring (2-Hand Control)	1
A-5822	Valve Lever (2-Hand Control)	1
A-582	Cam for Head Pressure	1
A-599	Fork casting for end of piston rod; order w/A1818 bearings	1
A-648	Spring hanger weldment; order w/15270 & 15271 bearings	2
A-4093	Lever; supply and exhaust valve operating	1
	NOTE: For 2-Hand Control, use A-5822 INSTEAD OF A-4093.	
A-1887	Pressure Lever; order also 15270 & 15271 bearings	1
A-673	Bar connecting snubber to cam	1
A-786	Snubber, right hand	
A-793	Rod, pressure adjusting	
A-892	Cylinder assembly, 2 3/4" I.D.	1
A-1600	Piston & Rod	1
15097-4	"O" Ring, 2 3/4" O.D., for piston air seal	1
15116	Base casting	1
15117	Top casting	1
15403	Gasket for base	1
16234-4	Nut	2
16372-85	Tie-bolt, hex head cap screw	2
18262-8	Tube	1
A-1645	Spring with one hook end and one insert end for cam lever	1
15737	Spring (advise ordering complete assembly)	1
16083	Insert, fine	1
A-1816	Roller Service Assy. for large head pressure cam	1
15733	Washer, special (advise ordering complete assembly)	2
16392	Bearing, needle, #BH-1412	1
16393	Bearing #IR-1916 (roller)	1
16397	Bearing, race, #IR-1012	1
A-1818	Bearing Service Assembly for piston rod fork, 5/8 x 1-1/8 x 3/4	2
16391	Bearing, needle #B-1412	1
16397	Bearing, race, #IR-1012	1
A-1863	Bracket, head mount service assembly w/bearings and zerks	1
A-672	Bracket Weldment (advise ordering complete assembly)	1
15047	Spacer, 1" I.D. x 1/2" long between bearings	1
15270	Bearing, race #IR-1616	2
15271	Bearing, needle, #B-2016	
16366	Zerk grease fitting	

PARTS LIST (cont.)

Part No.	Description	No. Req'd.
A-1866	Pressure Link Service Assembly w/bearings and zerks	1
A-674	Pressure link weldment only (advise ordering complete assy.)	1
16394	Bearing, race, #IR-2424	2
16395	Bearing, needle, #B-2824	2
15085-1	Roller, valve cam lever; order also 15767-9 press fotted	1
15100	Valve, 1/4" stem-operated "Whistle Valve"	2
15097-5	O-Ring, 5/16" O.D. for air	
15923	Disc., black for air	
16511	Spring	
16606	Seat holder	
16707	Lock nut	
27121-2	Stem	
27121-6	Screw	
15129	Spring for pressure adjusting rod	1
15270	Inner race bearing 1 x 1 1/2 x 1	10
15271	Needle bearing 1 x 1 1/2 x 1	10
15315	Shaft, cam roller (Pressure lever at piston rod fork)	1
15730	Shaft for head mount	1
15731	Shaft, rocker arm	2
15732	Shaft, spring hanger	1
15734	Spacer, bearing, 1 3/16" x 4	1
15767-6	Bushing 3/8 x 1/2 x 3/8, for operating rod	1
15767-9	Bushing 3/8 x 1/2 x 3/4, for cam roller #15085	1
15767-10	Bushing 3/8 x 1/2 x 1	1
15767-13	Bushing 1/2 x 5/8 x 1/2, for cam pivot	1
15767-14	Bushing 1/2 x 5/8 x 1, for valve lever pivot	1
15767-20	Bushing 3/4 x 1 x 1/2, for control bar shaft	2
15803	Spring, piston return (fork to frame)	2
15810	Shaft, cylinder pivot	1
15811	Insert for control bar or guard rail	2
15819	Cam for two positions of valve lever	1
15824	Shaft, cam to pressure link	1
15825	Shaft, pressure adjusting, 1 1/2 x 4 1/2	1
15857	Rod, valve lever actuation	1
*16048	Regulator, 1/4" cash	2
21660	Spring #1748, 30-90 lb. range	1
21661	Gasket for diaphragm	1
21662	Diaphragm	1
21665	Piston #16621 (thin stem with hycar seat)	1
21666	Spring for piston	1
27559-6	Gasket	1
*27559	Regulator, 1/4", Watts	2
27559-7	Kit (diaphragm, disc, gasket and strainer)	1
27559-8	Spring	1
16051-1	Bolt, elevator (adjustable, for air valve actuating)	2
16079-1	Gauge, air pressure, 0-100# back mount	1
16237	Hose, 3/8 x 22 flexible steam, with flange	2
16370	Gasket, teflon for flanged steam hose #16237	2
16371	Valve, Needle, hand adjusting	2

*NOTE: It is important to properly identify the regulator on your machine when ordering replacement parts. See note on "Parts Illustrations" page.

PARTS LIST (cont.)

Part No.	Description	No. Req'd
16386-1	Knob, star-type for pressure adjusting rod	1
16466-2	Shaft, frame to link	1
16508-17	Screw, 3/4 x 1 1/4 socket set, for ends of control shaft	2
16610	Strainer, Air	1
A-4055	Head stem valve (Complete)	1
25756-1	Spring	1
25756-2	Disc holder with Teflon Disc	1
25756-3	Stem & Box Assembly	1
25756-4	Lever pin	1
25756-5	Clamping nut	1
15097-23	O-Ring	1
25756-6	Stem lever pin	1
25756-7	Stem-operated lever	1
25756-8	Spring nut	1
16940	Gasket	1
25723	Lever	1
16110	Rubber bumper	2
25756-10	Seat, Stainless steel	1
25756-11	Teflon disc	1
25756-12	Wrench to remove seat (not shown)	1
A-5863	Buck Steam valve and cylinder	1
A-5862	Buck steam valve	1
25649-1	Disc holder with teflon seat	1
25649-3	Pin	1
25649-4	Body lock nut	1
15097-23	O-Ring, 3/8 O.D. x 1/4 I.D. x 1/16 W.	1
25649-6	Stem Guide	1
25649-2	Valve body	1
29596	Stem	1
25649-8	Spring	1
25649-9	Seat, stainless steel (not shown)	1
A-5908	Tube Weldment	1
16965	Gasket	1
29711	Buck cylinder end	1
29712	Buck cylinder piston	1
15097-11	O-Ring	1
16372-20	3/8-16 x 1 3/4 lg. hex head cap screw	1
16387-10	1/4-20 x 3/8 lg. Round head screw	2
16389-3	1/4 Lock washer	2
16372-31	3/8-16 x 1 1/4 lg. Hex head cap screw	1
16966	Gasket for buck valve	1
A-4956	Vacuum valve (not shown)	1
25650-1	Stem & Disc assembly	1
25650-2	Disc	1
25650-3	Gasket	1
26516	Spring	1
A-5076	Vacuum valve cylinder	1
15097-2	O-Ring	1
16562	#6 Head lift spring	4
16041	Spring insert (course)	8
A-541-K	Guard Rail shaft	1
15115-23	Guard Rail	1
A-809	Spring Bolt	1
A-1070	Spring Bolt	4

PARTS LIST (cont.)

Part No.	Description	No. Req'd.
A-648	Spring hanger block	1
15731	Pivot pin	1
16370	Gasket	1
16359-1	Plastilube Grease	
IRON ATTACHMENT PARTS		
A-6112	Water Spray Hose Assembly	1
A-6109	Iron control Box	1
A-5035	Lower hose assembly	1
A-6102	Mounting bracket	1
A-4064	Steam tank	1
16434	Switch	1
25048-1	Pilot light	1
25753	Tray	1
25833	Spring	1
26185	½" Plugged close nipple	1
16371	¼" Cut-off valve	2
25903	Solenoid valve	1
22320	Coil (115 volts)	1
25752	Spring	1
22331	Plunger Assembly	1
22332	O-Ring	1
27146-1	Wrench	1
30139	Iron Tray Mounting Pipe	1
25834	Spray Gun	1

PADDING LIST

Model	Part No.	Description	
42 VL	29571	Liner	1
	29572	Pad	1
	29573	Cover	1
	29574	Nylon Flannel	1
	17548	Grid Plate (Head)	1
46 VL	29597	Buck Liner	1
	29598	Pad	1
	29599	Cover	1
	29600	Flannel	1
	27023	Grid Plate (Head)	1